SERVED: June 30, 1992

NTSB Order No. EA-3600

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D.C.
on the 12th day of June, 1992

BARRY LAMBERT HARRIS, Acting Administrator, Federal Aviation Administration, Complainant, v. JOSEPH W. FREDERICK, and MARTIN J. FERKIN, Respondents.	Docket SE-10210 SE-10215

OPINION AND ORDER

The Administrator has appealed from the oral initial decision of Administrative Law Judge William E. Fowler, Jr., issued on February 15, 1990, following an evidentiary hearing.[1] We grant the appeal, reverse the initial decision, and reinstate the Administrator's order.

[1]The initial decision, an excerpt from the hearing transcript, is attached.

Respondents Frederick and Ferkin were pilot in command ("PIC") and first officer, respectively, of a Boeing 737 Piedmont Airlines, passenger-carrying flight from Raleigh, NC, to Norfolk, VA, during which an altitude deviation occurred. Mr. Frederick, the flying pilot at the time, was charged with violations of § 91.75(a) and 91.9 of the Federal Aviation Regulations ("FAR," 14 C.F.R. Part 91).[2] Mr. Ferkin, the non-flying pilot and first officer, was charged with violating § 91.9.[3]

There is no dispute that the deviation occurred nor is there disagreement as to many of the events that led to it. In ascending to cruise altitude, respondents were cleared to higher altitudes in small increments. Clearances were issued first to 5,000, then to 8,000, 10,000, 12,000, and lastly to 14,000 feet. The aircraft did not level off at 14,000 feet, however. It reached at least 14,700 feet.[4] Respondents were apprised of the

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[2]§ 91.75(a) (now 91.123) provided, as pertinent:

> (a) When an ATC [air traffic control] clearance has been obtained, no pilot in command may deviate from that clearance, except in an emergency, unless an amended clearance is obtained.

[There is no allegation in this case that an emergency existed.]

§ 91.9 (now 91.13) provided:

> No person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.

[3]No sanctions were imposed, as respondents filed reports under the Aviation Safety Reporting Program.

[4]Transcript at 33. But see stipulation ¶ 1 and Order of

deviation only when ATC queried them as to the aircraft's clearance. At the same time, the autopilot audibly alerted the crew that the aircraft was 900 feet from the cleared altitude (i.e., was at 14,100 feet, in comparison to the erroneously displayed altitude of 15,000). When respondent Ferkin looked at an altimeter, the aircraft was at 14,300, 300 feet above its cleared altitude. Tr. at 74-75. The deviation caused a loss of standard separation between the 737 and another aircraft flying at 15,000 feet approximately 2 miles away. With the deviation from the clearance, the two were on an intersecting course. ATC immediately directed respondents to change heading and return to the 14,000 feet clearance, which they did.

Although respondents admitted these events, they offered an affirmative defense of equipment malfunction. They claimed that the 737's autopilot system made an "uninitiated altitude display change." According to respondents, at each stage, respondent Ferkin received the clearance and dialed it into the autopilot's altitude display. The PIC confirmed the proper information had been entered. At some point after the 14,000-foot clearance was entered, the altitude readout on the autopilot allegedly reset itself to 15,000.[5] Given the natural inclination to rely on the

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Suspension ¶ 4, by which respondents admit that the aircraft reached 15,000 feet. The difference is not material.

[5]There is no dispute that this could occur. A bulletin to the aircraft's operating manual even contained an alert about the possibility and directed, among other things, that crews "[c]losely monitor the altimeter during all altitude changes to ensure that

autopilot (Tr. at 35), the aircraft's rate of ascent (3600 feet per minute; 300 feet every 5 seconds) and the other tasks each pilot was performing, respondents contended they could not be faulted for the deviation.[6]

The law judge agreed. Although the Administrator had contended there was no proof that a malfunction occurred, the law judge so found. In view of the less than 2 minutes between the clearance to 14,000 feet and the ATC altitude inquiry, he further found that respondents "were not able to catch [the deviation] until the flight had gone through the 14,000 feet." Tr. at 154. The law judge perceived the Administrator's theory as one of strict liability, and rejected that standard. The law judge also appeared to be influenced by his conclusions that this was an inadvertent violation, that the malfunction was an ongoing problem, and that respondents had no violation history.

In his appeal, the Administrator argues a simple theory: respondents failed adequately to monitor altitude and in so doing

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the autopilot acquires and levels off at the correct altitude." See Exhibit B attached to respondents' reply.

The Administrator, however, suggested that an equally possible version of events was that respondents entered 15,000 feet, not 14,000 feet in the autopilot. That possibility was supported by two facts: the stored flight plan for this flight included a cruise altitude of 15,000 feet; and respondents did not log the alleged malfunction as a mechanical discrepancy, in itself a FAR requirement with which pilots are well aware.

[6]Respondent Frederick, as PIC, allegedly was scanning all instruments inside the cockpit and also monitoring the sky for other aircraft. Tr. at 32, 51-2. Respondent Ferkin was doing paperwork, completing checklists and log entries. Id. at 74.

breached the high standard of care required of them both. Their knowledge of a potential autopilot malfunction made it even more critical that this equipment be carefully observed when ascending or descending. The Administrator questions how respondent Frederick could have been monitoring their instruments as he claimed, yet fail to recognize from any of the cockpit's three altimeters that the autopilot was not leveling the aircraft at 14,000 feet. "Had [respondents] been monitoring their altitude as they claimed, the altitude warning sounding at 14,100 feet would not have taken them by surprise." Appeal at 6-7.

The Administrator rejects the law judge's reliance on the short time in which all this occurred, contending that the duty to monitor the autopilot and comply with traffic control instructions, especially when the aircraft is approaching an assigned altitude, is not a function of time. Id. at 7. The Administrator also rejects the law judge's holding that to find a violation here requires a standard of strict liability. He notes that respondents not only acknowledged the error in relying exclusively on the autopilot, whether or not it was a flawed instrument, but also recognized their responsibility for the aircraft's compliance with, among other things, ATC instructions -- a responsibility that does not change simply because the autopilot is engaged. Tr. at 49-50, 84-85.[7]

[7]The Administrator also contests the law judge's comments regarding respondents' clean records, and the suggestion in the initial decision that the violation should be excused because it

This case is very similar to Administrator v. Baughman, EA-3563, May 28, 1992, in which the parties agreed that the autopilot malfunctioned in the same fashion as found here by the law judge. As here, the altitude deviation was not identified until ATC queried respondent's altitude. The law judge declined to find that the non-flying PIC had violated the FAR, concluding that he had done all he could do.[8]

We reversed the initial decision. We framed the issue as "whether respondent satisfied his duties as a reasonable and prudent pilot exercising the highest degree of care in relying on the autopilot . . . rather than cross-checking, using both the autopilot and the altimeter, to confirm proper altitude." Id. at 3, fn. 7. We rejected respondent's arguments that he had other duties that prevented his total attention to altitude, and that it was reasonable for him to assume the autopilot was working properly.

Affirmance of the Administrator's order and reversal of the initial decision is also required here. Respondents are charged

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was inadvertent. We agree. These factors are relevant, not to whether a violation has been proven but, if at all, to the sanction itself. See, e.g., Administrator v. Mohumed, NTSB EA-2834 (1988).

[8]Not all the circumstances of the two cases are identical. In Baughman, the law judge found that respondent had relied on the autopilot for altitude information. There was no testimony that the altimeters were monitored. In addition, violations of § § 91.75(a) and 91.9 were found even though,in Baughman, the events occurred before the advisory notice regarding the autopilot malfunctions was issued.

with the highest degree of care,[9] and they were capable at all relevant times during the flight of comparing their three altimeters to the cleared altitude. Neither's other duties were so extensive or more significant that such a fundamental matter as altitude clearance might be justifiably ignored, especially during ascent and descent.

Ascending out of 12,000 feet to 14,000, and at 3600 feet per minute, respondents should have been exceedingly alert to the aircraft's altitude and the period of time it would take until it began to level off.[10] Whether they failed adequately to monitor altitude because they relied too heavily on the autopilot, or because they did not scan the altimeters frequently enough, or because they did scan the altimeters but did not appreciate the significance of the readout, is irrelevant.[11] Whatever the reason, the result reflects less than the highest degree of care of a reasonable and prudent pilot. This conclusion is even more compelling in view of respondents' knowledge of the possibility for autopilot malfunction, a circumstance not presented in Baughman. In addition, we note the very real endangerment both

[9]Respondents agree that this standard, which is set forth in Baughman (see discussion, supra), applies. Reply at 20.

[10]Accord Baughman, supra, at 5 ("The closer the aircraft comes to the prescribed altitude, the more careful a prudent pilot would be to avoid a deviation.").

[11]The law judge did not make a finding regarding which of these three problems caused the deviation, and because it is irrelevant, we are also not deciding the issue.

to persons and property created by respondents' behavior. As the law judge found, "[b]ut for the vigilance of Air Traffic Control . . ., the altitude deviation here might not have been caught." Tr. at 154.

ACCORDINGLY, IT IS ORDERED THAT:

1. The Administrator's appeal is granted; and

2. The initial decision is reversed.

COUGHLIN, Acting Chairman, LAUBER, KOLSTAD, HART and HAMMERSCHMIDT, Members of the Board, concurred in the above opinion and order.